Patent Applic # 10/765,772 Title: Oriented Connections For Leadless and Leaded Packages

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My RESPONSE to Office Action Date Mailed 01/08/2008 Confirmation # 2451

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IN THE CLAIMS

SUMMARY:

Please amend my claims, as follows:

- 1. Cancel all the old Claims 1 through 58,
- 2. Amend Claims 59 and 60,
- 3. Keep Claims 61 and 62 as they are,
- 4. Amend Claim 63,
- 5. Keep Claims 64 through 67 as they are,
- 6. Amend Claims 68 and 69,
- 7. Keep Claims 70 and 71 as they are,
- 8. Amend Claim 72,
- 9. Keep Claims 73 through 76 as they are, and
- 10. Add the NEW Claims 77 through 92.

as follows:

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DETAILS

Please amend my claims, as follows:

Claims 1 through 58. (Cancelled)

59. (Currently Amended) A substrate and attachment pad assembly comprising:

a substrate having a planar side surface; and

[a group] an array of attachment pads for constituting connecting elements, formed

on said planar side surface of said substrate;

<u>wherein</u>

[at least two or more] each one of said attachment pads, [having] has an elongated

shape and elongating in [directions that are] a direction that is substantially

perpendicular to individual rays, each such ray extending from a predetermined

<u>focal</u> point on said planar side surface of said substrate to substantially the center

of each respective said attachment pad;

or in other words,

said [at least two or more] each one of said attachment pads [being] is arranged so as

to have [their] its [respective] short [axes] axis in a direction which [extend]

extends radially from a predetermined focal point on said planar side surface of

said substrate to substantially the center of each respective said attachment

pad.

60. (Currently Amended) An assembly according to claim 59, wherein said

predetermined **focal** point on said planar side surface of said substrate is located

substantially at the center of said [group] array of said attachment pads.

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- 61. (Previously presented) An assembly according to claim 59, wherein said elongated shape is an oblong shape.
- 62. (Previously presented) An assembly according to claim 59, wherein said elongated shape is a rectangular shape.
 - 63. (Currently Amended) A substrate and attachment pad assembly comprising: a substrate having a planar side surface; and
 - [a group] an array of attachment pads formed on said planar side surface of said substrate for connection with terminals of a mounting article which is to be mounted on said substrate;

wherein

each <u>one</u> of said attachment pads, when observed in a plan view, [having] has an elongated shape and elongating in a direction that is substantially perpendicular to a respective individual ray, extending from a <u>focal</u> point which is located substantially at the center of said [group] array of said attachment pads to a point near the center of said attachment pad with respect to its shape observed in a plan view;

or in other words,

each <u>one</u> of said attachment pads, when observed in a plan view, [<u>having</u>] <u>has</u> its short axis in a direction which extends radially from a <u>focal</u> point which is located substantially at the center of said [<u>group</u>] <u>array</u> of said attachment pads to a point near the center of said attachment pad with respect to its shape observed in a plan view.

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64. (Previously presented) An assembly according to claim 63, wherein said substrate

is an electronic device, such as a ceramic substrate or a Printed Circuit Board or an IC

device.

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65. (Previously presented) An assembly according to claim 63, wherein said

mounting article is an electronic device, such as an IC device or a Chip or a Package.

66. (Previously presented) An assembly according to claim 63, wherein said

elongated shape is an oblong shape.

67. (Previously presented) An assembly according to claim 63, wherein said

elongated shape is a rectangular shape.

68. (Currently Amended) A substrate and attachment pad assembly comprising:

a substrate having a planar side surface; and

[a group] an array of attachment pads for constituting connecting elements, formed

on said planar side surface of said substrate;

<u>wherein</u>

[at least two or more] each one of said attachment pads [having] has an elongated

shape and arranged so as to have its long exes axis which extend in directions

that are substantially perpendicular to individual rays, each said ray extending

from a predetermined **focal** point on said planar side surface of said substrate to

substantially the center of [each respective] said attachment pad;

or in other words,

said [at least two or more] each one of said attachment pads being arranged so as to

have its short axis [which] extend radially from a predetermined focal

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point on said planar side surface of said substrate to substantially the center of [each respective] said attachment pad.

- 69. (Currently Amended) An assembly according to claim 68, wherein said predetermined <u>focal</u> point on said planar side surface of said substrate is located substantially at the center of said [group] <u>array</u> of said attachment pads.
- 70. (Previously presented) An assembly according to claim 68, wherein said elongated shape is an oblong shape.
- 71. (Previously presented) An assembly according to claim 68, wherein said elongated shape is a rectangular shape.
 - 72. (Currently Amended) A substrate and attachment pad assembly comprising: a substrate having a planar side surface; and
 - [a group] an array of attachment pads formed on said planar side surface of said substrate for connection with a mounting article which is to be mounted on said substrate;

wherein

each one of said attachment pads, when observed in a plan view, [having] has an elongated shape and arranged so as to have [their] its long [axes] axis extending in [directions] a direction that [are] is substantially perpendicular to an individual [rays] ray, [each] said ray extending radially from a focal point which is located substantially at the center of said [group] array of said attachment pads to substantially the center of [each respective] said attachment pad;

or in other words,

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the short [axes] axis of each one of said attachment pads, when observed in a plan

view, [having being] is oriented in a radial [directions] direction extending from

a **focal** point which is located substantially at the center of said [group] array of

said attachment pads to substantially the center of [each respective] said

attachment pad

73. (Previously presented) An assembly according to claim 72, wherein said

elongated shape is an oblong shape.

74. (Previously presented) An assembly according to claim 72, wherein said

elongated shape is a rectangular shape.

75. (Previously presented) An assembly according to claim 72, wherein said substrate

is an electronic device, such as a ceramic substrate or a Printed Circuit Board or an IC

device.

76. (Previously presented) An assembly according to claim 72, wherein said

mounting article is an electronic device, such as an IC device or a Chip or a Package.

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77. (New) An assembly according to claim 59, wherein said predetermined focal

point on said planar side surface of said substrate is the geometric center of all the

attachment pads in said array of attachment pads.

78. (New) An assembly according to claim 59, wherein said predetermined focal

point on said planar side surface of said substrate is the thermal center of all the

attachment pads in said array of attachment pads.

79. (New) An assembly according to claim 59, wherein said predetermined focal

point on said planar side surface of said substrate is a fixed point in space.

80. (New) An assembly according to claim 59, wherein said substrate comprises

electrical / electronic circuits, which in turn comprise active and/or passive devices.

81. (New) An assembly according to claim 68, wherein said predetermined focal

point on said planar side surface of said substrate is the geometric center of all the

attachment pads in said array of attachment pads.

82. (New) An assembly according to claim 68, wherein said predetermined focal

point on said planar side surface of said substrate is the thermal center of all the

attachment pads in said array of attachment pads.

83. (New) An assembly according to claim 68, wherein said predetermined focal

point on said planar side surface of said substrate is a fixed point in space.

84. (New) An assembly according to claim 68, wherein said substrate comprises

electrical / electronic circuits, which in turn comprise active and/or passive devices.

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85. (New) An assembly according to claim 63, wherein said focal point on said planar side surface of said substrate is the geometric center of all the attachment pads in said array of attachment pads.

86. (New) An assembly according to claim 63, wherein said focal point on said planar side surface of said substrate is the thermal center of all the attachment pads in said array of attachment pads.

87. (New) An assembly according to claim 63, wherein said focal point on said planar side surface of said substrate is a fixed point in space.

88. (New) An assembly according to claim 63, wherein said substrate comprises electrical / electronic circuits, which in turn comprise active and/or passive devices.

89. (New) An assembly according to claim 72, wherein said focal point on said planar side surface of said substrate is the geometric center of all the attachment pads in said array of attachment pads.

90. (New) An assembly according to claim 72, wherein said focal point on said planar side surface of said substrate is the thermal center of all the attachment pads in said array of attachment pads.

91. (New) An assembly according to claim 72, wherein said focal point on said planar side surface of said substrate is a fixed point in space.

92. (New) An assembly according to claim 72, wherein said substrate comprises electrical / electronic circuits, which in turn comprise active and/or passive devices.

/Gabe Cherian/